#### SOUTH CAROLINA DEPARTMENT OF DISABILITIES AND SPECIAL NEEDS

Volume 2 Issue 10 October 2003

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# FROM THE DESK OF THE DDSN MEDICAL CONSULTANT

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# **HYDRATION**

People need water to live. Water keeps our body systems working.

## Not Enough Water

If our body gets short of water, it is dehydrated. When this happens we get thickening of secretions – it is harder to cough, we get constipated, our skin firmness is lost, our kidneys can shut down, we do not sweat as well as usual, and our blood circulation may be reduced. We will often become cranky and irritable but if the problem continues and gets worse, we can have a shut down of our energy and other body systems with blood pressure falling, coma and death if not treated. In our care of consumers we will always try to prevent the problem rather that have to treat the extreme condition.

#### Too Much Water

Some people have problems with too much water retained in their body. They may have several conditions associated with kidney disease, congestive heart failure or even some drug side effects or psychiatric conditions where they drink too much liquid. The problem may show with swollen ankles and veins in the neck and the person may be short of breath when exercising or lying down. The problem may cause stress to the heart and swelling of various organs and can be very serious if not treated properly. Most persons with fluid overload will be identified by a physician as having significant illness and we will have a plan that includes how much fluid they can have, how to monitor them and what medicines to use

The person may need to be weighted regularly and fluid restricted according to orders. If any person has sudden shortness of breath, please ask for your health team to see them. If a person we follow for fluid control has a sudden weight gain or becomes breathless, please follow your protocol and have them seen by the health care team.



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## **DEHYDRATION**

This is the more common problem with water and can be rapidly threatening to health.

Many of the consumers we care for may have difficulties taking enough fluids and food because of dysphagia or other neurological or physical problems. Sometimes our consumers cannot recognize that they are thirsty or are unable to tell us their needs. We need to be alert, provide enough water, check on progress, and have a plan to avoid problems. Please consult your health care team if in doubt. Groups of consumers we need to take special care with include those who have cerebral palsy, dysphagia, reflux, those who have had a stroke and those who have disorders such as dementia or serious depression that may mean they do not recognize their thirst. We also need to be watchful for consumers who have had past episodes of dehydration or malnutrition, repeated infections or fevers and especially those who have diabetes. Some medicines we use mean that we need to watch for dehydration. Check carefully if a consumer is on diuretics, steroids, sedatives, and several of the psychotropic medications also may cause changes in water needs.



Special situations that are likely to increase the chance of dehydration.

- 1. **Hot Weather** We sweat to cool ourselves and this results in loss of water from the body. More water loss if it is hotter and more if it is humid.
- 2. **Exercise** The heat we generate in exercise will cause us to sweat (and also to lose water as we pant!). We need to maintain good circulation and kidney function during exercise.



- 3. *Fever* If a person has a high fever, they will lose water from sweating and often do not feel like actively taking in sufficient water.
- 4. **Vomiting and Diarrhea** Both are forms of loss of water from the gut (top and bottom). If you are vomiting it is especially difficult to get enough fluids in to replace that lost and IV fluids are often needed if vomiting persists. Stool can lose a lot of water from the body.



- ♦ Water is vital to life.
- ♦ We need at least 5-8 (8 oz) glasses of water each day.
- ◆ Constipation may happen if a person does not drink enough water.
- ♦ Fluids need to be regular and the safe consistency.
- ♦ Increase water intake on hot days.
- ♦ Vomiting and diarrhea can cause dehydration.
- ♦ Watch calories in juices.

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# Risk Situations continued from page 2

- 5. **Excessive urine loss** Sometimes this does occur in infection or as an effect of medication but the most important group is the persons with *diabetes*. Excessive urine can be a serious problem if a person has insufficient insulin for their needs. We must always be sure that a diabetic gets insulin according to their orders. It keeps them well. We must change insulin or omit it *only* after an order from the person's prescribers.
- 6. **Inadequate intake** We have mentioned several of the reasons this may occur. Beware also of high concentration "booster" diets where we may give high calorie but low water intake.

#### How do we prevent dehydration?

- ✓ Offer water with all meals and snacks.
- ✓ Keep everyone (consumers and staff) drinking enough regular drinks (6-8 oz. drinks; 3-4 times a day; extra at meals).
- ✓ Watch persons who vomit, have diarrhea, and do not drink easily. Check their urine output. If it is small they may not have enough fluid intake.
- ✓ Take special care of persons who have swallowing difficulties. They may need their fluid thickened. Check with your nutrition team.
- ✓ If a person does not have urine to pass after 4-6 hours or if it is dark, please check with your health care team.
- ✓ Check persons with diabetes. If they pass a lot of urine, they may be losing more fluid than is safe.
- ✓ On average we each need between 5-9 (8 oz.) glasses of water each day. (Soda cans are usually 12 oz.). A little often is better than a big drink. Caffeine and alcohol will often cause a person to pass more urine and may not be helpful. Sugar drinks, Gatorade, and juices all have calories, so we may need to choose water instead. Most of us will enjoy it if it is ice water.
- ✓ If you find a person at-risk is not passing urine or is very quiet or irritable, please ask your health care team to review them. We are wise to treat early rather than run risks later. A person who is thirsty needs water (give in a form appropriate for their swallowing ability). If they are dry in the mouth, have an increased pulse rate, a loss of weight, lax skin, or show confusion, weakness or speech difficulties, they may be dehydrated and in any case need to be seen by the health care team.

If we are aware, active, and provide adequate hydration, we can protect our consumers from many problems.



Keep hydrated before, after, and during exercise.



Drink plenty of water during playtime too!